Chapter 1

General introduction
**Vignette of Mary**

Mary is a 27-year-old woman diagnosed with a complex posttraumatic stress disorder and a dissociative disorder. She is well known to mental health services due to her frequent and severe self-harming behaviour. The announcement of her admission to hospital causes considerable turmoil on the ward. “Oh no, not again”, sigh several nurses. A discussion arises concerning possible unsafe items she has with her: should they search her luggage for items she could use to harm herself, or should they discuss this openly with Mary? Most of the nurses have bad memories of Mary’s severe self-harming behaviour and they think they can minimize this by controlling her as much as possible. So they decide her luggage will be searched. The nurses agree that clear rules should be set upfront about what will be tolerated, especially concerning self-harm. The nurses also want some assurance from the management that Mary will be transferred to another ward if her behaviour cannot be managed adequately on the ward.

When Mary arrives on the ward, she is accompanied by her husband. Both look tired and tense and the husband leaves as soon as possible. Mary is given a list of rules to follow strictly and her luggage is searched for unsafe items. The nurse tells Mary that the psychiatrist will visit her that afternoon and that she has to stay in plain view. When the psychiatrist arrives, she says she hasn’t got much time. She just wants to shake hands with Mary and check her medication, inform her about the rules and make an appointment for later that week.

Later that evening, one of the nurses finds Mary in a corner of the bathroom with a bloody towel around her leg. She has several deep cuts in her left leg. The nurse sighs and grumbles to Mary: “Why didn’t you come to us and tell us about your urge to harm yourself? Now you have to visit the ER for stitches. Don’t you realize that there are other patients as well?” And indeed, the psychiatrist-on-duty sends Mary and the nurse to the ER of a general hospital nearby.

While Mary is at the ER, another nurse calls Mary’s husband to inform him about his wife’s self-harm and her visit to the ER, in accordance with protocol. The husband is angry and argues “that one reason for admitting her was that he would not be confronted with his wife’s self-harm for a while so he could get some rest too. Hadn’t she been admitted to hospital precisely to prevent this? Obviously, the staff had failed.”

When Mary returns to the ward, she is told that she has to go to sleep now and that they will talk about the incident the next morning. When Mary enters her bedroom, she finds it completely empty, with only a bed with sheets and blankets, a clock on the wall, and nothing
Vignette of Anja

Anja is a 27-year-old woman diagnosed with a complex posttraumatic stress disorder and a dissociative disorder. She is well known to mental health services due to her frequent and severe self-harming behaviour. The announcement of her admission to hospital causes concern on the ward. “It probably means things are too big for her to handle right now. Let’s hope we can help her”, say several nurses. A discussion arises concerning possible unsafe items she has with her, as most of the nurses are concerned about Anja repeating her self-harming behaviour during her stay on the ward. Should they search her luggage for items she could use to harm herself, or should they discuss this openly with Anja? They argue that Anja is in need of help and care, but that she is also an adult who should be treated as such. So they decide they will discuss it with Anja, and maybe with her husband if he accompanies her.

When Anja arrives on the ward, she is accompanied by her husband. Both look tired and tense and the nurse takes some time to talk to them both. She says: “By the look of it, you both have had a difficult time, am I right? Do you want to tell me about it?” The nurse, Anja and her husband discuss previous stressful events and corresponding experiences that have contributed to the current crisis situation. When the husband leaves, the nurse tells him staff will take good care of Anja. She reminds him that the policy of the ward is to inform him in case of emergencies.

Anja is accompanied to her room, and the nurse and Anja together examine the luggage and discuss which items are safe for Anja and which ones are best locked away. She also tells Anja that the psychiatrist will visit her around three that afternoon.

When the psychiatrist arrives at 3.00 p.m., she says she really wants to talk to Anja more extensively but unfortunately hasn’t got much time because of an emergency. So she wants to shake hands with Anja and check her medication for now. Together they plan a new appointment for the next day from 10.00 to 10.30 a.m.

Later that evening, Anja knocks on the door of the office. She has a bloody towel around her arm and says with embarrassment that things went wrong. The nurse accompanies Anja to a treatment room and asks Anja: “How are you now? Is it all right if I take a look at your wounds to see what medical aid is necessary? Do you want to talk about what happened now or shall we do that later?” After taking care of the wound, the nurse discusses with Anja what she needs right now and whether specific measures are required overnight to help her feel safe. Together they
work out a plan for the rest of the night.

Preface
Self-harm, defined as any intentional, direct or indirect harm of body tissue with a non-fatal outcome [1], is a sign of disturbed emotions resulting from difficult-to-manage problems in someone’s life. These emotions are usually intense and overwhelming, and – viewed from the perspective of the person who self-harms – can only be endured by engaging in self-harming behaviour. In mental healthcare, patients who self-harm can evoke different reactions in professionals, as can be seen in the vignettes of Mary and Anja.

The vignette about Mary describes a worrisome situation. The professionals do not know how to respond adequately and they blame the patient for her self-harming behaviour. In turn, the patient and her family blame the professionals for not taking good care of the patient. Ultimately, the patient is left alone with her grief and misery. Nobody asks her how she is doing or what she wants or needs, let alone speaks to her about the underlying emotions and intentions of her self-harming behaviour. As described in the vignette, the interactions on the ward disturb the patient further and contribute to feelings of loss of autonomy and decreased self-management. As a result, instead of helping Mary, her admission worsens her situation, leading to an increase in the risk of self-harm instead of its reduction.

The vignette of Anja describes more or less the same case, but with a different response by the healthcare providers: they react to Anja with empathy and understanding, leading to completely different experiences for her. She is treated with respect and is actively involved in her treatment, reducing her feelings of loneliness and stress. Repeat self-harming behaviour cannot be avoided completely, but it is less severe. There is clear communication about what is going to happen and when, with interventions and agreements tailored to her needs and performed with her consent.

The two vignettes make clear that the attitude of healthcare providers towards patients who self-harm is of major influence on the patients’ wellbeing and, as result, on their self-harming behaviour: it can aggravate as well as diminish that behaviour.
Self-harm
Self-harm occurs in different groups of people: children and adolescents, the elderly, people with intellectual disabilities, and people with psychiatric disorders [1, 2]. In this thesis we focus on the latter group: patients who receive treatment and care in a mental healthcare setting.

Incidence and prevalence data is hard to provide: according to Zlotnick, Mattia and Zimmerman [3], 33.2% of all patients with psychiatric conditions exhibit self-harming behaviour in their lifetime. In particular, patients suffering from major depression, anxiety disorders, posttraumatic stress disorder, borderline personality disorder, dissociative identity disorder, eating disorder, schizophrenia and substance abuse were found to exhibit this behaviour [3-5]. However, patients often avoid seeking help in (mental) healthcare after they harm themselves, and professionals often fail to record all cases [3, 6-8], so the exact incidence is unclear, and probably underestimated.

Functions of self-harm
Self-harm serves different functions. Nock and Prinstein [9, 10] developed a four-function model based on empirical research [11] in which the events immediately preceding and following the behaviour are used to describe the functions. According to this model, there are four possible reinforcement processes: (1) intrapersonal negative reinforcement, (2) intrapersonal positive reinforcement, (3) interpersonal negative reinforcement and (4) interpersonal positive reinforcement.

Intrapersonal negative reinforcement occurs when the self-harm leads to the immediate alleviation of negative feelings or thoughts, for instance tension, anger or anxiety. Intrapersonal positive reinforcement is caused by an increase in desired feelings or thoughts after self-harm, like self-stimulation or the ability to feel emotion (for instance when feeling numb or to end dissociation).

Interpersonal reinforcement processes are social and communicative in nature. In interpersonal negative reinforcement, the self-harm puts an end to events that the patient cannot stop in some other way, for example conflicts or bullying. In interpersonal positive reinforcement processes, the self-harm leads to an increase in desired events, for example attention or support [12, 13]. This four-function model can be helpful for
understanding the functionality of the self-harming behaviour, but it does not explain why some people use self-harm specifically as a coping mechanism, and not other behavioural expressions. And although extensive research has yielded many factors that are associated with self-harm, this has not yet led to one model explaining who uses self-harm and who does not.

**Dimensions of self-harm**

The five dimensions of self-harm as elaborated by Walsh (2012) are helpful in increasing our understanding of self-harming behaviour. These dimensions give us more insight into the vulnerability of patients who display self-harming behaviour. The five dimensions are (1) environmental, (2) biological, (3) cognitive, (4) affective and (5) behavioural.

*Environmental dimension*

The environmental dimension consists of (a) family historical elements, (b) client historical elements and (c) current environmental elements.

Family historical elements refer to the family circumstances in which the patient grew up. Self-harm is linked to growing up in families with a relatively frequent occurrence of mental illness, substance abuse, violence, self-destructive behaviour and other situations. For instance, children who grow up in families where drugs or self-destructive behaviour are used as problem-solving strategies learn that these are possible ways to handle life’s difficulties.

The client historical elements refer to experiences which have a direct influence on the child. Neglect, physical and sexual abuse, separation and loss have been found to be related to self-harm, but also a family situation in which the child’s emotions are consistently ignored, denied, ridiculed or condemned. In this situation, children learn to distrust their feelings or that they will only get attention when they exhibit extreme behaviour, for instance with self-harm.

Current environmental elements are the burdensome circumstances in the present. Often, these are circumstances that cause a great deal of stress (such as an exam, performance or conflict) or are linked with the past (such as renewed loss experiences or abuse), and that evoke emotions which can only be managed by self-harm.
Biological dimension

There is a growing body of research on the biological elements of self-harm, leading to different hypotheses. There are two different hypotheses concerning self-harm and the endogenous opioids system (EOS), one based on addiction and the other on pain [14]. According to the addiction hypothesis, self-harm leads to the release of endogenous opioids (e.g. endorphins), resulting in pleasurable feelings and stress reduction. Frequent acts of self-harm lead to tolerance and withdrawal, and thus the need for more self-harm. The pain hypothesis suggests that pain sensitivity is diminished owing to a constitutional abnormality in the EOS that inhibits negative feedback in the EOS or results in the overproduction of endogenous opioids. This can lead to feelings of numbness or dissociation, with self-harm being used to end these feelings.

Another hypothesis concerns serotonin neurotransmission in the brain. Lower levels of serotonin are associated with self-harm, especially with impulsive forms of self-harm [15]. Also, several studies on the treatment of self-harm with SSRIs (Selective Serotonin Reuptake Inhibitors) have revealed reductions in self-harm (see for an overview Sher & Stanley, 2009), suggesting serotonin plays a role in at least some forms of self-harm.

Finally, research suggests that some people who self-harm may have a diminished sensitivity to physical pain: they report no pain sensations during the self-harming act. Research shows that even after controlling for distress and medication, the pain perception of patients who self-harm is significantly lower than in healthy control subjects [16].

Cognitive dimension

Walsh divides the cognitive dimension into (i) cognitive interpretations of environmental events and (ii) self-generated cognitions (p. 67). Self-harm is related to irrational and/or dysfunctional cognitions, which are based in part on the individual’s interpretation of environmental events. One example concerns the self-blaming thoughts of people who are sexually abused: they often feel responsible for the abuse because they did not stop it
or let it go on for a long time. Another example is when people believe that they are not allowed to make any mistakes. If it is impossible to fulfil this condition, the thought of failure causes so much shame and despair that self-harm is the only way to cope with the intense emotions.

Self-generated cognitions have an internal trigger. For no apparent reason, people may have negative thoughts and judgments, such as thinking each day will bring them nothing but discomfort and pain. Many people who self-harm not only have frequent pessimistic cognitions but also many thoughts that trigger self-harm directly, such as: “I deserve to be punished”, “I’m not worth it”, “This is the only way to show people how much pain I am in”.

Affective dimension
Emotions play a central role in self-harm. The main reason patients self-harm is because they have difficulty regulating their emotions. Among the burdensome emotions mentioned by patients are anxiety, anger, despair, grief, guilt, shame, hopelessness, insecurity, loneliness, and worry. These emotions pile up, making them feel as if they will “explode” [17], something that can only be prevented by the act of self-harm. Self-harm helps them reduce and even stop the distressing feelings [18]. How self-harming behaviour diminishes these negative affects is not yet known [5]. Many distressing emotions arise from dysfunctional and irrational cognitions, which occur frequently in people who self-harm, as mentioned above.

Behavioural dimension
This last dimension describes behaviour before, during and after self-harm. Conflicts or failure experiences are well-known behaviours preceding self-harm, but also sexual behaviour (especially when triggering memories of bad experiences), substance abuse or eating-disordered behaviour, such as anorexia nervosa and bulimia nervosa.

Preparing for self-harm, for example choosing the location and method, also belongs in this dimension, as does the patient’s behaviour in response to his or her self-harm: does the patient take care of the wound and does he or she inform other persons
about the self-harm? This dimension also includes behaviour which is carried out immediately after self-harm, such as relaxation or returning to the usual activities.

The five dimensions help to better understand the determinants of self-harm and how they are interrelated and interdependent. For instance: invalidating environments teach distorted cognitions and poor emotional coping strategies, and biological vulnerability affects the reaction to environmental elements, but also cognitions and emotions. The dimensions show how we can unravel the complexity of self-harming behaviour and, by doing so, indicate directions for treatment.

Patient perspectives on self-harm

Studies of patients’ own experiences with self-harm reveal that they have several reasons for harming themselves [5, 19-27]: (1) affect regulation is mentioned most by patients: the self-harm is used to alleviate acute negative affect or affective arousal. Anti-dissociation (2) is another reason: self-harm is a response to periods of dissociation or depersonalization as feelings of numbness are especially difficult to endure. Self-harm may also be a coping mechanism for resisting suicidal urges (3). Some patients use self-harming behaviour to influence people in their immediate environment (4). Sometimes patients feel themselves merging with the people around them and use self-harm to affirm the boundaries of the self (5). Self-punishment, the expression of anger or derogation towards oneself, can be a reason for self-harm (6). Finally, a minority of patients mention sensation-seeking as a reason for self-harm (7): it generates excitement or exhilaration.

The patient who harms himself or herself is not always aware of the specific function of his or her behaviour, but mostly feels immediate relief of tension as a result [5]. The patient also experiences feelings of control and calmness after self-harm. Unfortunately, these feelings are of short duration and the self-harming behaviour will be repeated when feelings become unbearable again. This behaviour can last for many years; sometimes it never ends or may be linked to an eventual suicide.

Staff perspectives on self-harm
Mental healthcare staff are confronted on a regular basis with patients who self-harm. This confrontation evokes many different feelings in treatment staff. These feelings can be positive and rewarding, leading to their understanding the patients and allowing them to be helpful to them [28-31]. Most of the feelings experienced by treatment staff are negative, however [28-41]. The following feelings may arise:

- Disbelief and disgust: most staff members believe that “normal” people keep away from pain in their lives. Taking care of the body is seen as good and thus something to strive for. It is almost unbelievable to them that a small group of people acts contrary to this belief. Sometimes these people inflict horrible wounds on themselves, evoking feelings of disgust and panic in treatment staff, especially because the injuries were inflicted deliberately.

- Anger, frustration and feelings of betrayal: these feelings occur especially when self-harming behaviour is perceived as “manipulative” or when a person harms himself or herself over and over again.

- Disappointment: when the patient harms himself or herself, the caregiver can interpret this as a personal failure and as a degradation of his or her professional relationship with the patient.

- A burden of responsibility: the caregiver may fear being blamed for the patient not getting better and for the high-risk nature of the patient’s behaviour.

- Powerlessness: sometimes it seems that patients who harm themselves do not listen to any advice and are hardly capable of changing their behaviour. This evokes feelings of powerlessness in the treatment staff.

While some staff members find it rewarding to take care of patients who self-harm, most caregivers find it difficult to do so. They find it challenging to build a good relationship with these patients and to take good care of them [42]. They not only have to deal with the difficult feelings provoked by self-harm, but they also have few effective interventions. Most existing interventions focus on treating the psychiatric disorder, assuming that the behavioural problem, such as self-harm, will be treated as well.

**Interaction between patient and staff**
The confrontation between self-harm patients and staff, each with their own perspective on self-harm, often results in unsatisfactory professional relationships. Many patients claim they do not receive appropriate care and they often feel ignored by treatment staff. When they ask for help, many feel the response is one of hostility, rejection, neglect and ridicule [43], which may lead to the reinforcement of negative thoughts and feelings, thus increasing the urge to harm themselves. They feel the treatment is often aimed at stopping the self-harming behaviour, which is not their first priority: they want an open dialogue in which they can express their experiences with self-harm as a solution [44]. Based on these responses, patients tend to distance themselves from treatment staff and struggle on alone with their problems and emotions.

For treatment staff, the combination of provoked negative feelings and lack of effective interventions often results in negative attitudes towards patients who self-harm. Generally, they experience low self-efficacy in dealing with these patients: many staff members mention feeling inadequate and incompetent when caring for patients who self-harm [35, 45-48]. As such, treatment staff either tend to distance themselves from patients who self-harm, thus creating a gap that is difficult to bridge, or they try to control them and thus deprive them of their autonomy (e.g. taking decisions for them instead of with them). Either way, there is lack of communication about the problems and emotions that underlie the self-harming behaviour.

**Aim of the thesis**

The overall aim of this thesis is to improve the management of self-harm in psychiatric patients. The attitude of the healthcare provider and his or her relationship with the patient who self-harms play a central role throughout the thesis.

The thesis is structured as follows:

*Chapter 2* describes a literature study about nurses’ attitudes towards self-harm, the factors that influence these attitudes, and how nursing education can help improve attitudes towards self-harm.

*Chapter 3* describes a training programme focusing on improving communication about and with patients who self-harm. The effects of this programme are evaluated in a quasi-
experimental research design. The main focus is on creating a supportive, therapeutic relationship with the patient, something that requires a positive attitude and a sufficient level of self-efficacy in caring for patients who self-harm. The chapter also describes the programme evaluation: participants were asked about their learning experiences and the organisation and quality of the training.

Chapter 4 describes the development and validation of the Self-Efficacy in Dealing with Self-Harm Questionnaire. We developed this questionnaire to measure the effects of the training programme on the self-efficacy of professionals dealing with self-harm.

Chapter 5 describes the validation of the Dutch version of the Attitude Towards Deliberate Self-Harm Questionnaire (ADSHQ) [49]. To measure the effects of the training programme on the attitude of professionals, we translated the ADSHQ into Dutch.

Chapter 6 focuses on a specialized treatment programme for patients who have severely disrupted relationships with their professional caregivers. Many of these disrupted relationships are related to self-harm. This chapter shows that the attitude of professionals and a constructive relationship are crucial in the treatment of severe psychiatric problems. Besides the characteristics of the treatment programme, the chapter also describes the characteristics of the patients admitted to this programme and the results of the treatment.

Chapter 7 describes a qualitative study of patients’ perspectives on recovery from severe self-harming behaviour. Patients who harmed themselves severely for many years were asked about the process through which they ceased or reduced self-harm. This chapter reveals that it is possible to successfully cease severe self-harming behaviour and develop other harmless behaviour instead.

Finally, Chapter 8 summarizes the thesis, discusses the main findings and offers solutions.
References


32. McCann TV, Clark E, McConnachie S, Harvey I: Accident and emergency nurses’ attitudes towards patients who self-harm. Accident and emergency nursing 2006, 14:4-10.


